REMARKS

The claims were amended as defined above. The amendments are fully supported by the specification, claims, and figures as originally filed. No new matter is believed or intended to have been introduced by those amendments.

In the Office Action, the Examiner rejected claims 1, 2 and 17 under 35 U.S.C. § 112 ¶ 2 as being indefinite. The Examiner rejected claims 1-12, 17, 18, 20 and 23 under 35 U.S.C. § 103 as being obvious over U.S. 7,027,586 ("Bushey") in view of U.S. Application 2002/0083067 ("Tamayo"). As set forth below, each of the pending claims includes limitations which are not taught or suggested in either Bushey, Tamayo or the combination of those references. Additionally, the pending claims are sufficiently clear to apprise one of ordinary skill in the art of their scope, and thereby provide a clear warning to others as to what would constitute infringement. Accordingly, the applicants request that the pending rejections be reconsidered and withdrawn. Remarks addressed to the individual claims are set forth below.

Claim 1

Claim 1 recites a system for processing user inquiries which comprises multiple response systems having different types which are configured to communicate with a global knowledge database and provide categorized responses from that database to user inquiries. The system of claim 1 also includes an analysis database configured to store data relating to categorized responses provided by at least two of the response systems, and a report generator configured to generate an interactive report using the data stored in the analysis database. In the Office Action, claim 1 was rejected as obvious over the combination of Bushey and Tamayo. Bushey discloses technology for routing communications from customers to agents in a service center.[1] Tamayo discloses technology for data mining which combines multiple data sources to generate predictions and recommendations.[2] Neither the routing technology of Bushey, nor the data mining technology of Tamayo, nor their combination, teaches or suggests multiple different types of response systems providing categorized responses from a global knowledge database to user inquiries. A discussion of

[1] Bushey, col. 1, ll. 23-25.
[2] Tamayo, ¶ 2.

the sections of Bushey and Tamayo which were cited as supposedly teaching those response systems is set forth below.

With respect to Bushey, the Office Action made at least two clear errors in arguing that that reference teaches different types of response systems providing categorized responses from a global knowledge database.

First, the Office Action erred in arguing that a global knowledge database is taught by Bushey's agent data processor and agent interfaces.[3] As Bushey makes clear, neither of those components is a database, let alone a global knowledge database which includes a plurality of categorized responses. Instead, the agent interfaces are interfaces used by agents to communicate with a customer service center.[4] The agent data processor is a processor which gathers information about the agents through the agent interfaces[5] and uses it to create models that help determine how to assign agents to customer inquiries.[6]

Second, the Office Action erred in arguing that providing categorized responses from the global knowledge database is taught by Bushey's disclosure of voice, instant messaging sessions, and email.[7] In Bushey, voice, instant messaging and email are given as examples of modalities that an agent could use to communicate with a customer.[8] Information about what modalities an agent can use is considered when the system of Bushey determines how to route a customer, so that there is not a mismatch between the needs of a customer and the information an agent can provide.[9] However, simply teaching that agents can use different modalities to interact with customers does not indicate that those modalities are used to provide categorized responses from a global knowledge database, as is recited in claim 1. Accordingly, the aspects of Bushey cited in the Office Action teach neither a global knowledge database, nor providing categorized responses from such a database to customer inquiries, and the rejection of claim 1 which relied on those aspects should be reconsidered and withdrawn.

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[3] Office Action at 3 (citing components 240 and 250 of figure 2).
[4] Bushey, col. 8, ll. 58-62 ("Agent interfaces 240 allow communications between agents and the service center 150. The agents may reside at the service center 150, or they may be connected to the service center from a remote location through the agent interfaces 240.").
[5] Bushey, col. 8, l. 67 – col. 9, l. 3 ("Information regarding the agents is gathered by the agent data processor 250 through the agent interfaces 240. The agent information relates to identification of each agent and attribute data for each agent.").
[6] Bushey, col. 9, ll. 21-25 ("The agent attribute information gathered by the agent data processor 250 is used to compile the agent models associated with a particular agent. The agent data processor 250 also uses information from all agents to create the agent models.").
[7] Office Action, page 3.
[8] Bushey, col. 9, ll. 8-10 ("a human agent may be capable of voice communications over the PSTN, instant messaging sessions and email.").
[9] Bushey, col. 11, ll. 5-24.

With respect to Tamayo, the Office Action made at least two clear errors in arguing that that reference teaches different types of response systems providing categorized responses from a global knowledge database.

First, the Office Action erred in arguing that Tamayo teaches providing categorized responses from a global knowledge database because it discloses a "data response."[10] Arguing that a "categorized response" is taught by a simple "data response" effectively reads the word "categorized" out of the claim. As set forth in the pre-appeal brief of October 13, 2008 (which resulted in prosecution being reopened based on the failure of the previous rejection to consider the word "categorized"), effectively removing words from a claim in order to support a rejection is improper, and any rejections which rely on such removal are clearly erroneous.

Second, the Office Action erred in completely ignoring the requirement of multiple types of response system when comparing claim 1 with Tamayo. Claim 1 recites a "first response system being of a first type of response system"[11] and a "second response system being of a second type of response system."[12] In rejecting claim 1, the Office Action argued that the first response system of a first type was taught by Tamayo's disclosure of "a personal computer system."[13] Then, instead of even asserting that Tamayo discloses a second response system of a second type, the Office Action stated that Tamayo teaches "the second response system being of a **first type of response system** (i.e., a second personal computer system)."[14] As with arguing that the requirement of a "categorized response" is taught by a "data response," this treatment of the second type of response system is improper because it effectively reads the requirement for multiple types of response system out of the claim. Accordingly, the citation to Tamayo cannot remedy the weaknesses identified above in Bushey, and so the rejection of claim 1 which relied on the combination of those references should be reconsidered and withdrawn.

Like the art-based rejections of claim 1, the rejection of claim 1 as indefinite under 35 U.S.C. § 112 should be reconsidered and withdrawn. Claim 1 was rejected as indefinite under 35 U.S.C. § 112 based on the Office Action's assertion that it was unclear what the phrases "a combination thereof" and "any recommendation related thereto" referred to. While the applicants do not concede that those phrases in claim 1 were unclear, out of a

[10] Office Action, page 5.
[11] Claim 1, clause (b)
[12] Claim 1, clause (c).
[13] Office Action, page 5.
[14] *Id.* (emphasis added)

desire to reach an agreement with the Examiner, those phrases have been removed from the claim. Accordingly, the applicants request that the rejection of claim 1 under 35 U.S.C. § 112 be reconsidered and withdrawn.

Claims 2 – 12

With respect to claims 2-12, the applicants note that each of those claims depends (either directly or indirectly) from claim 1, and therefore is patentable over the combination of Bushey and Tamayo for at least the reasons give above regarding claim 1. Additionally, the applicants note that claims 2-12 include limitations which are not recited in claim 1 that provide further grounds for distinguishing the cited art. Examples of limitations recited in claims 2-12 which are not taught or suggested in the art of record can be found in claims 11 and 12.

Claim 11 recites an analysis engine which is configured to determine the number of times a categorized response is generated by the first response system. The Office Action asserted that Bushey teaches an analysis engine configured to determine the number of times a categorized response is generated by the first response system in lines 4-60 of column 9, and 5-41 of column 11.[15] However, this assertion does not accurately reflect the teachings of the cited reference. Lines 4-60 of column 9 of Bushey disclose an approach to using agent models to match agents to customer inquiries, and then routing the customer inquiries to the appropriate agents. This approach is based on the agents' ability to receive and process communications on different modalities,[16] and does not teach or suggest either a categorized response or determining the number of times a categorized response is generated by a response system. Similarly, lines 5-41 of column 11 disclose routing customer inquiries based on agent models, but do not teach or suggest determining the number of times a categorized response is generated by a response system as recited.[17] As a result, even if the rejection of claim 1 were proper, the rejection of claim 11 should still be reconsidered and withdrawn based on the additional limitations recited in that claim.

Claim 12 also recites an analysis engine, and further recites that that analysis engine is configured to update an analysis database when a categorized response is generated by a first

[15] Office Action at 8.
[16] *See* Bushey, col. 9, ll. 15-17 ("An agent's ability to receive and process communications using each modality is used as a basis to generate an agent model."); col. 9, ll. 33-34 ("A match processor 270 compares the customer profile with the retrieved agent models."); col. 9, ll. 42-45 ("A routing processor 280 processes the routing of the customer's request to an agent. The routing processor 280 receives the match scores of each retrieved agent models [sic] from the match processor 270.").
[17] *See* Bushey, col. 11, ll. 20-24 ("The customer profile is compared with the selected model for each agent in the set at S305. A best match is determined from the comparison with the models at S305. The intelligent routing system routes the communications to the best matched available agent at S306.").

response system. In rejecting claim 12, the Office Action asserted that the analysis database is taught by Bushey's disclosure of a "match processor," and that updating when a categorized response is generated by the first response system is taught by lines 4-60 of column 9 and 5-41 of column 11.[18] This mapping between claim 12 and Bushey is flawed for at least two reasons.

First, the "match processor" of Bushey is a software process which creates scores based on comparing customer profiles against agent models,[19] not a database.

Second, even if the "match processor" were a database, the cited sections of Bushey do not teach or suggest updating that processor, either when a categorized response is generated by a first response system, or at any other time. Instead, as discussed above with respect to claim 11, the cited passages of Bushey teach how the technology disclosed in that reference routes customer inquiries to appropriate agents. Accordingly, as was the case with claim 11, even if the rejection of claim 1 is maintained, the rejection of claim 12 should be reconsidered and withdrawn, based on the additional limitations recited in that claim and not taught or suggested in the art cited in the Office Action.

In addition to the art based rejections of claims 2-12 the applicants note that the Office Action rejected claim 2 as indefinite under 35 U.S.C. § 112 because it was allegedly unclear what the phrase "a combination thereof" from that claim referred to. In response, while not conceding that claim 2 was unclear in its previous form, the applicants have amended that claim to remove the phrase "a combination thereof." Accordingly, the rejection of claim 2 as indefinite under 35 U.S.C. § 112 should be reconsidered and withdrawn.

Claim 17

With respect to claim 17, the applicants note that that claim, while not identical to claim 1, shares the same basic requirement discussed above with respect to claim 1 that multiple different types of response systems provide categorized responses from a global knowledge database.[20] The applicants also note that the sections of the art of record cited

[18] Office Action at 9.
[19] See Bushey, col. 9, ll. 33-39.
[20] This requirement can be found in clauses (a)-(c) of claim 17, which, for the purpose of convenience, are set forth below:

(a) a first response system configured to provide a first categorized response to a first user inquiry, wherein the first categorized response comprises at least one identifier, the first response system being a first type of response system;

(b) a second response system configured to provide a second categorized response to a second user inquiry independent of the first response system, wherein the second

against the relevant limitations in claim 17 are identical to the sections of the art of record cited against claim 1.[21] Accordingly, the applicants submit that the arguments set forth above regarding claim 1 can be equally applied to claim 17, and therefore submit that the rejection of claim 17 as obvious over Bushey in view of Tamayo should be reconsidered and withdrawn for at least the reasons given above regarding claim 1.

Additionally, the applicants note that claim 17 was rejected as indefinite under 35 U.S.C. § 112, based on the Office Action's assertion that it was unclear what the phrases "a combination thereof" and "any recommendation related thereto" in that claim referred to. In response, while the applicants do not concede that those phrases in claim 17 were unclear, out of a desire to reach an agreement with the Examiner, those phrases have been removed from the claim. Accordingly, the applicants request that the rejection of claim 17 under 35 U.S.C. § 112 be reconsidered and withdrawn.

Claims 18, 20 and 23

With respect to claims 18, 20 and 23, the applicants note that each of those claims depends from claim 17, and therefore is patentable over the combination of Bushey and Tamayo based on the limitations incorporated by reference from that claim. Additionally, the applicants note that claims 18, 20 and 23 include limitations which are not recited in claim 17 that provide further grounds for distinguishing the cited art. In particular, the applicants would like to draw the Examiner's attention to the limitations recited in claim 23, which the applicants submit are clearly absent from the art of record.

Claim 23 recites that the report generated by the report generator of claim 17 comprises an overlaid contact graph comprising a plurality of shapes, wherein each shape comprises dimensions corresponding to data stored an analysis database. In rejecting claim 23, the Office Action argued that those limitations are taught in Bushey, col. 9, l. 42 - col. 10,

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categorized response comprises at least one identifier, the second response system being a second type of response system;

(c) a global knowledge database configured to communicate with the first response system and the second response system, wherein the first categorized response and the second categorized response are both stored in the global knowledge database.

[21] With respect to Bushey, the Office Action cited the agent data processor and interfaces, and elements 240 and 250 of figure 2 as teaching the "global knowledge database" in both claims 1 and 17, and cited Bushey's disclosure of voice, instant messaging sessions and email as teaching the "first categorized response" from both claims 1 and 17. With respect to Tamayo, the Office Action cited the "data response" from that reference as teaching the first categorized response from both claims 1 and 17, and cited Tamayo's disclosure of a user system and another user system as teaching the first and second response systems of both claims 1 and 17. *See* Office Action at 3-5 (discussing claim 1); Office Action at 9-11 (discussing claim 11).

l. 11, figure 5, and lines 13-46 of column 12.[22] However, the applicants submit that those sections of Bushey disclose the **internal operation** of Bushey's routing processor in assigning available agents to handle customer inquiries,[23] **not** a report comprising an overlaid contact graph as recited in claim 23. The rejection of claim 23 overlooks this key point, and as a result mischaracterizes Bushey when mapping that reference to claim 23. For example, the rejection of claim 23 asserted that a plurality of shapes from an overlaid contact graph are taught by Bushey's disclosure of "pointer, entry."[24] In Bushey, the term "entry" refers to an agent from a list used by the routing processor in its internal processing. The routing processor evaluates the agents on the list until it finds one which can handle an inquiry. The "pointer" is used in to keep track of the agent who is currently being evaluated, and is decremented to identify the next agent as the processor proceeds down the list.[25] As a result, neither the "pointer" nor the "entry" of Bushey teaches or suggests shapes in an overlaid contact graph as recited in claim 23 – a conclusion would have been immediately apparent if the Office Action had not overlooked the fact that those terms are used in the context of Bushey's internal processing.[26] Accordingly, even if the art cited in the Office Action did teach or suggest the limitations of claim 17, the rejection of claim 23 should still be reconsidered and withdrawn.

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[22] Office Action at 13.

[23] Bushey, col. 9, l. 42 – col. 10, l. 11 discloses that

> A routing processor 280 processes the routing of the customer's request to an agent... The routing processor 280 generates a list of best matched agents that obtain match scores equal to or above the threshold level based on the comparisons of the customer profile with the agent models.... The routing processor 280 monitors the availability of the agents, and routes the customer request to the best matched available agent on the list, as long as the match score is higher than any currently applicable threshold.

Figure 5 of Bushey is "an exemplary flow diagram showing a method for selecting a best-matched agent using an intelligent routing system." *See* Bushey, col. 2, ll. 46-48.

Lines 13-46 of column 12 of Bushey are simply a textual description of steps S501-S510 of figure 5, and do not add anything to the routing method depicted in that figure.

[24] Office Action at 13.

[25] Bushey, col. 12, ll. 15-26:

> At S502, a list of the agent and models is created and a pointer is set to point to the first entry (agent) on the list. At S503, a determination is made whether a model is available for the agent corresponding to the entry being considered. In particular, a determination is made whether an agent model exists for the particular modality required by the customer. If an agent model does not exist (S503=No), the pointer is decremented down the list of available agents by one at S511 and the determination at S503 is made for the next agent on the list.

[26] *See* MICROSOFT COMPUTER DICTIONARY 410 (5th ed. 2002) ("In programming and information processing, a pointer is a variable that contains the memory location (address) of some data rather than the data itself."); *id.* at 195 (defining entry as a "unit of information treated as a whole by a computer program.").

Claims 25-26

In addition to the claims discussed above, the applicants have added new claims 25-26. With respect to claim 25, the applicants submit that that claim is allowable over the art of record for at least the reasons given with respect to claim 23, as claim 25 recites a report comprising an overlaid contact graph comprising a plurality of shapes which have at least one dimension corresponding to data from an analysis database. With respect to claim 26, the applicants submit that that claim is allowable based on its depending from claim 25, and also based on its recitation of "generating the overlaid contact graph using a means for generating an overlaid contact graph." Because that language is set forth as a means for performing a specified function, it can only be rejected based on a showing that the prior art teaches an identical function *and* teaches doing so using means which are the same as (or equivalent to) those disclosed in the present application (in this case, paragraphs 23-24 and figure 6 of the application as filed). Since, as set forth above, the art of record does not even teach the function of generating an overlaid contact graph, claim 26 cannot properly be rejected based on the art of record, and should be allowed in its current form.

Conclusion

The applicants note that the discussion above is not intended to suggest, or to be taken as a concession, that the remaining limitations are taught or suggested in the art of record. The applicants expressly reserve all rights and arguments with respect to distinctions not explicitly noted herein. In addition, to the extent that the amendments constitute a narrowing of the claims, such narrowing of the claims should not be construed as an admission as to the merits of the prior rejections. Indeed, the applicants traverse the rejections and preserve all rights and arguments. To the extent that any particular statement or argument by the Office in the pending Office Action has not been explicitly addressed herein, the same should not be construed as an acquiescence or admission by the applicants that such statements or arguments by the Office are accurate or proper.

Based on the foregoing, all pending claims are in a condition for allowance. Accordingly, the applicants respectfully request reconsideration and an early notice of allowance. Should the Examiner wish to discuss the amendments or arguments made herein, the applicants invite the Examiner to contact the undersigned at (513)651-6915 or via e-mail at **wmorriss@fbtlaw.com.**

The Commissioner for Patents is hereby authorized to charge any deficiency or credit any overpayment of fees to Frost Brown Todd LLC Deposit Account No. 06-2226.

Respectfully submitted,

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